

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

[02] VSD (Vestigial Side Band) has been chosen as a standard form for transmitting a terrestrial microwave channel in digital television broadcasting. Thus, concepts and ideas have been made to propose the early-stage antennas for a VSB receiver, and ATSC prepares the standardization of the VSB antennas. Yet, no antenna applied to a digital television receiver has been introduced in public, and further has been commercialized.

[06] Besides, a plurality of multi-paths and frequency obstacles have a chance to exist in the terrestrial channels in the digital television broadcasting. Therefore, receive characteristics of an antenna of a digital television receiver may have a great influence on the entire characteristics of the digital television receiver. Other antennas and their problems depending on their environments are described as follows by referring to FIG. 1 to FIG. 3.

[50] Referring to FIG. 5, the VSB receive chip 103 in FIG. 4 is constructed with an automatic gain control part 103-1 controlling a gain of an output signal of the intermediate frequency automatic gain control part 102 ~~again~~—automatically, a timing and carrier restoration part 103-2 restoring the

timing and carrier loss on an output of the automatic gain control part 103-1, an equalizer 103-3 equalizing an output of the timing and carrier restoration part 103-2, a phase tracker 103-4 tracking down a phase of an output signal of the equalizer ~~103-3~~ 103-3, and a forward error corrector 103-5 outputting a final VSB signal by correcting a forward error on an output signal of the phase tracker 103-4.

[71] In the scan process, the antenna controller detects whether a channel signal exists at an initialized state. If the channel signal is detected an effective power of the channel signal, which is being detected, is stored in the memory 105 by rotating the direction of the antenna 100 at ~~360~~ 360° and an antenna pattern is selected when a maximum signal power is detected.